

## **Title: Multilayered Vegetable Farming as a Pathway to Sustainable Income: A Case Study of Shri Bhrigurashan's Agricultural Experiment in West Champaran**

### **Introduction**

In rural West Champaran, the agricultural landscape has historically been dominated by traditional single-crop cultivation. However, with the support of NABARD (National Bank for Agriculture and Rural Development) and a multi-layer vegetable farming initiative by SSEVS (Samagra Shikshan Evam Vikas Sansthan), a new approach is transforming local livelihoods. This case study explores the journey of Shri Bhrigurashan, a local farmer, and his father, Shakaldeo Prasad, as they embrace this innovative farming technique to diversify income and enrich their community's agricultural knowledge.

### **Background**

The project, implemented in Nautan Block of West Champaran district, aimed to introduce multi-layer vegetable farming to increase income for farmers by optimizing land use throughout different crop cycles. The initiative included comprehensive farmer training, supply of quality seeds, and regular field monitoring. In one of the first meetings, Shri Bhrigurashan expressed enthusiasm for this opportunity, highlighting his desire to combine scientific methods with traditional practices.



### **Baseline Survey and Preparation**

After orienting the farmers about the initiative, a baseline survey was conducted to understand crop needs for the Kharif season. Bhrigurashan, along with other farmers from five villages, participated in these surveys, sharing insights into crop requirements and areas of interest. SSEVS organized training sessions that involved not only farmers but also invited local companies specializing in seeds, fertilizers, and pesticides to educate farmers about new products, including organic options.

### **Initial Steps in Farming**

Bhrigurashan ji was having a plot of approximately three "katthas" (900 Squire meters) suitable for vegetable cultivation, on which he was given seeds for various greens like spinach, Hara Saag, and Bitter Gourd. Bhrigurashan, however, expressed an eagerness to experiment beyond the recommended crops, indicating he wanted to leverage this opportunity to try cultivating crops like turmeric and ginger as well.

### **Progress and Challenges**

Over time, with support from the project coordinators and necessary resources like plastic wires for bitter gourd trellises, Bhrigurashan's farm began showing visible progress. Initially,

leafy greens and turmeric sprouted vigorously, followed by successful yields of bitter Gourd, beans, and peanuts. Regular visits by project coordinators helped address minor issues like pest control and ensured that plants received adequate sunlight and water.

When Bhrigurashan was asked why he chose peanuts and cluster beans, crops not commonly grown in Champaran, he shared that he wanted to set an example for other farmers. His approach aimed to assess the viability of new crops, which could diversify future income streams for his community.

### **Market Integration and Income Generation**

As crops matured, Bhrigurashan began selling his produce in local markets, starting with leafy greens and later, vegetables like bitter Gourd and radish. The steady flow of income bolstered his and his father's enthusiasm. Seeing the value of diversified cropping, he further planted crops like drumsticks, bananas, and papayas, contributing to a continuous harvest cycle.

### **Sustained Learning and Community Impact**

The success of Bhrigurashan's farm attracted attention from the local Krishi Vigyan Kendra (Agricultural Science Centre). Scientists visited his farm to observe the results and shared additional methods for sustainable farming, including using pheromone traps for pest control. They also provided training to all the participating farmers, encouraging a transition to organic farming practices.

The economic benefits of this experiment were evident as Bhrigurashan calculated potential earnings from turmeric and ginger alone to be around ₹70,000, with additional earnings expected from leafy greens, radish, Bitter Gourd and other vegetables.

### **Future Plans and Sustainability**

When asked about the upcoming Rabi season, Bhrigurashan was already preparing. He planned to plant Bottle Gourd seedlings around the field and intended to grow radishes, Tomatoes and leafy greens after the turmeric and ginger harvests. This continuous cropping approach ensured year-round income, transforming his small plot into a dynamic, profit-generating asset.

### **Conclusion**

This case study illustrates how the multi-layered vegetable farming model, when effectively supported and implemented, can significantly enhance rural incomes and reduce dependency on traditional farming.

Bhrigurashan's innovative spirit and proactive learning have not only increased his family's income but also inspired other farmers in his village to embrace sustainable agriculture. His journey underscores the importance of adaptive farming practices and showcases the role of government and NGO partnerships in empowering rural communities.



For those looking to integrate scientific methods into agriculture while respecting traditional knowledge, Bhrigurashan's success story is an inspiring example of resilience, adaptability, and the transformative potential of rural innovation.

This story reflects how integrated support, training, and resources can enable small-scale farmers to achieve sustainable growth, aligning with NABARD's goals to foster resilient rural economies.